

SOME WHALE SHARKS AND SUN FISHES CAPTURED OFF CEYLON.

BY

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(With one plate and two text-figures)

The present article briefly describes some captures of whale sharks and sun fishes of the family Molidae from the vicinity of Ceylon.

The earliest record of what is probably the whale shark is by Baldeus a Dutchman who had travelled extensively in the East. In his book of travels (1671) he states that the waters around Ceylon abound in various fishes and among the forms mentioned are 'Galleon-fishes, Sharks, Orados', etc. The first named might well be the Whale Shark, *Rhineodon typus* Smith, which has recently attracted considerable attention (Gudger 1934, and Prater 1941).

***Rhineodon typus* Smith**

On 16th January 1942 the local press described the capture of a large spotted shark 'about 25 feet long and weighing nearly two tons' from off Kalutara on the west coast of Ceylon. Some days later a collector of the Colombo Museum who was sent out to investigate returned with the following information:—

The shark, a male, was captured at about 150 yards from the shore in a seine net at 11 a.m. on 15th January 1942. The animal was noosed and towed to the estuary of the Kalu ganga and thence down the lagoon to Katukurunda by fifty men. The head was as large as that of an 'elephant' with a mouth resembling the slit in a 'letter box', the jaws were toothless. The intestines contained quantities of minute shrimps (probably Euphausiids) massed into boli. The depth of the sea at the site of capture is about 2 fathoms. No shark of this species was known from Kalutara before, but the writer saw a specimen about 15 feet long by the road side near Beruvala about 8 miles south of Kalutara, in December 1930. The dried pectoral and caudal fins of the Kalutara specimen were obtained on the 30th of January. They were bluish brown with white spots; the pectorals were more strongly spotted than the caudal and white below. A pectoral fin measured 3 feet 5 inches along the outer edge and was 2 feet 1 inch wide across its base. There were 13 spots along the longest part of the fin, 11 spots along its broadest part (pl. I. b). The caudal fin was 5 feet 3 inches along

its upper lobe, 2 feet $7\frac{1}{2}$ inches along its lower lobe, the tips of the lobes were 5 feet apart. Its spots were fewer and less prominent than on the pectorals, the most conspicuous being 18 in a row along the upper lobe and lateral to the vertebral column (pl. I. a).

Comparison of these measurements with those given by Prater (1941) suggests that the specimen was about 24 feet long.

The body ridges of *Rhineodon* and its pigmentation of white spots on a slate background are somewhat reminiscent of the oceanic leathery turtle *Dermochelys coriacea* (Linné) while the arrangement of the white pigment into alternate transverse bands and rows of spots occurs on such oceanic Pisces as tunnies and certain sail and spear fishes which are never taken in shore seines.

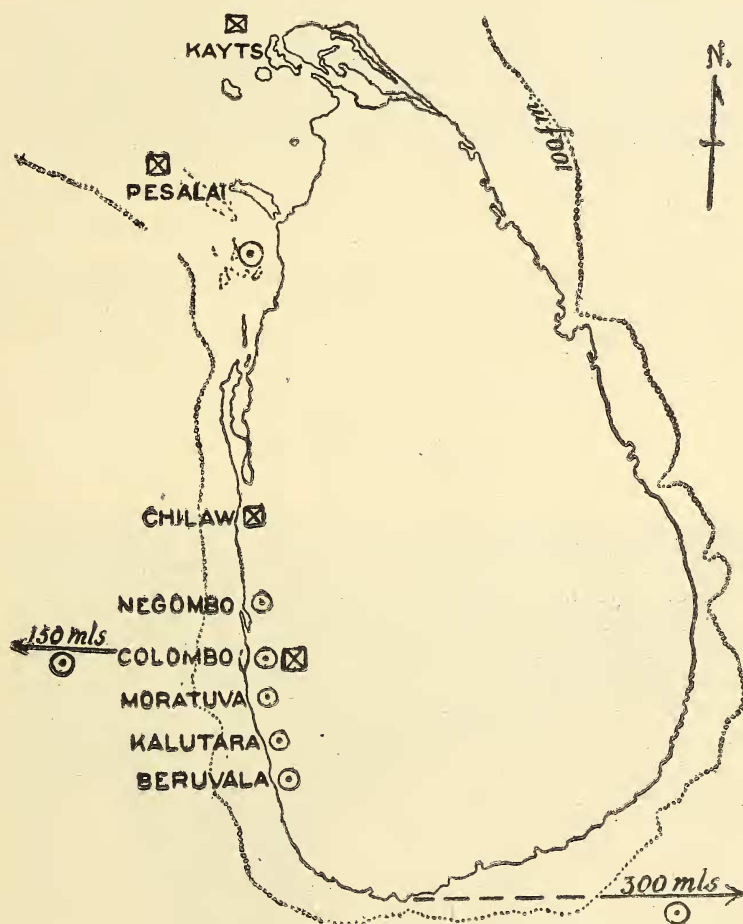


Fig. 1.—Map of Ceylon showing the 300 metre isobath and the stations off which *Rhineodon* (circles) and the Molidae (squares) have been captured.

The entry of whale sharks into shallow water and the fact that specimens have been rammed by vessels at considerable distances

from Ceylon are of interest. With two exceptions the various individuals noted from Ceylon (Prater 1941) were taken in water under 20 feet deep. The locality where a 40-foot specimen was rammed by the Japanese ship 'Katori Maru' en route to Singapore was described by Captain Matsukura in the daily press (*Daily News*, August 6, 1935) as follows:—'We left Colombo on the afternoon of July 9th at 2.30 p.m.; the following day I was having my siesta in my cabin. We were about 300 miles out in the Indian Ocean. Suddenly I heard a noise which seemed to come from below.' . . . 'Presently I discovered it was a large fish, about 40 feet long, and with a big gash just behind its head.' . . . 'From the symmetrical shape of the tail and the sharp fins we could tell that it was not a whale but a tiger shark. Also the fish was turned on its side and I saw the gills'. Doubtless the captain termed the fish a tiger shark owing to its markings. The other such occurrence was on November 23, 1932, when the Dutch ship 'Johan van Oldebarnevelt' struck a whale shark in lat. $7^{\circ}.5'$ N., long. $77^{\circ}.51'$ E., about 150 miles west of Colombo (Gudger 1937). A study of the steam ship routes shows that both occurrences are approximately between 6° and 7° N. latitude. The first collision would be in water over 2000 fathoms deep, the second in water between 1000 and 2000 fathoms deep.

All whale sharks from the coastal waters of Ceylon were captured or noted between January and March. Those from the deeper waters off Ceylon were noted in July and November.

The list is as follows—January—3 sharks.

February—2 do.

July—1 do.

November—1 do.

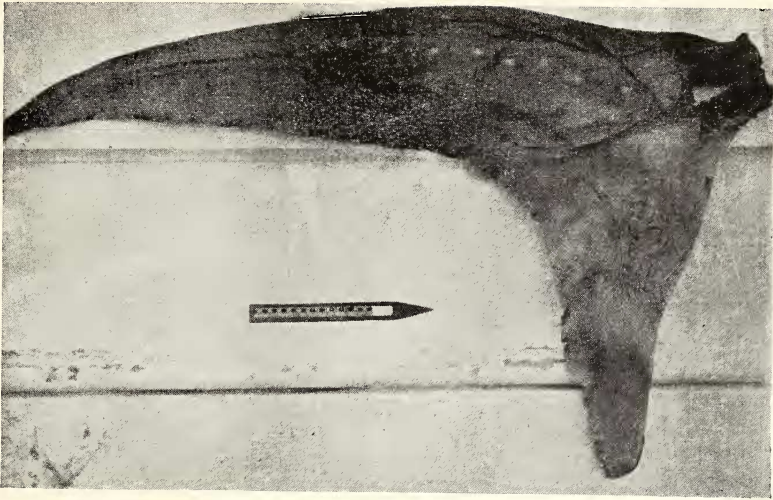
December—1 do. (Beruvala).

Although the whale shark exceeds 50 feet in length individuals over 22 feet are rarely taken from the coastal waters of either India or Ceylon.

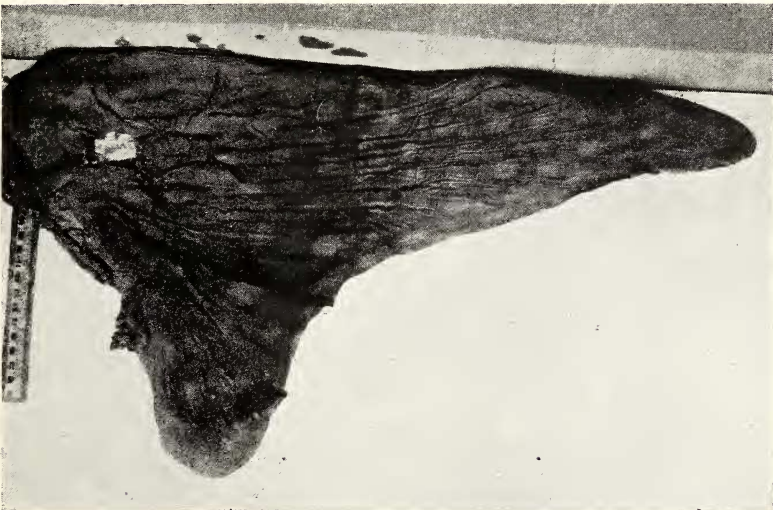
The ramming of two individuals in July and November at 300 miles to the east, and 150 miles to the west of Ceylon respectively, suggests that the shark is not uncommon in the deeper waters of the tropical Indian Ocean. The fact that one of these specimens was 40 feet long suggests that generally only adolescents about 20 feet long venture close to land. These are probably attracted by the unusually rich supply of plankton resulting from the monsoon rains.

Family MOLIDAE.

This family comprises three monotypic genera; of these the genera *Ranzania* Nardo 1840 and *Mola* Cuvier 1798 are known from Ceylon waters and have been captured in February, May, and June. The number of individuals known from Ceylon is five; three of these are



A. A caudal fin of Whale Shark taken at Kalutara, Ceylon.



B. Pectoral fin of Whale Shark taken at Kalutara, Ceylon.

